

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2005/020050

A. CLASSIFICATION OF SUBJECT MATTER

G01N21/35

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

GOIN GOIJ

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal , PAJ, INSPEC, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/068018 A1 (PEPPER DAVID M ET AL) 6 June 2002 (2002-06-06) figures 1,4,5,7 -----	1-9
X	US 2004/058339 A1 (NAGEL MICHAEL ET AL) 25 March 2004 (2004-03-25) figures 4-6 ----- -/-	1-9

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

'A' document defining the general state of the art which is not considered to be of particular relevance

'E' earlier document but published on or after the international filing date

'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

'O' document referring to an oral disclosure, use, exhibition or other means

'P' document published prior to the international filing date but later than the priority date claimed

'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

'&' document member of the same patent family

Date of the actual completion of the international search

15 December 2005

Date of mailing of the international search report

22/12/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Mason , W

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2005/020050

C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>NAGEL M ET AL: "Three-dimensional polymer/metal -based resonators for THz-biosensing"</p> <p>INFRARED AND MILLIMETER WAVES, 2004 AND 12TH INTERNATIONAL CONFERENCE ON TERAHERTZ ELECTRONICS, 2004. CONFERENCE DIGEST OF THE 2004 JOINT 29TH INTERNATIONAL CONFERENCE ON KARLSRUHE, GERMANY SEPT. 27 - OCT. 1, 2004, PISCATAWAY, NJ, USA, IEEE, 27 September 2004 (2004-09-27), pages 819-820, XP010795242</p> <p>ISBN: 0-7803-8490-3</p> <p>figure 1</p>	1-9
X	<p>PATENT ABSTRACTS OF JAPAN</p> <p>vol. 2000, no. 20,</p> <p>10 July 2001 (2001-07-10)</p> <p>& JP 2001 074647 A (SUZUKI MOTOR CORP),</p> <p>23 March 2001 (2001-03-23)</p> <p>abstract; figure 7</p>	1-9
A	<p>DE 102 57 225 B3 (TECHNISCHE UNIVERSITAET BRAUNSCHWEIG CAROLO-WILHELMINA)</p> <p>8 April 2004 (2004-04-08)</p> <p>figures 1-3</p>	1-9
A	<p>US 6 573 737 B1 (LYON STEPHEN A ET AL)</p> <p>3 June 2003 (2003-06-03)</p> <p>figures 5,7,14</p>	1-9
A	<p>TOROSYAN G ET AL: "Application of narrowband tunable THz-radiation for biomedical sensing"</p> <p>LEOS 2002. 15TH. ANNUAL MEETING OF THE IEEE LASERS & ELECTRO-OPTICS SOCIETY. GLASGOW, SCOTLAND, NOV. 11 - 12, 2002, ANNUAL MEETING OF THE IEEE LASERS AND ELECTRO-OPTICS SOCIETY, NEW YORK, NY : IEEE, US,</p> <p>vol. VOL. 1 OF 2 ,</p> <p>11 November 2002 (2002-11-11), pages 343-344, XP010620552</p> <p>ISBN: 0-7803-7500-9</p> <p>figure 1</p>	1-9

-/--

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2005/020050

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category ^a	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>NAGEL M ET AL: "INTEGRATED PLANAR TERAHERTZ RESONATORS FOR FEMTOMOLAR SENSITIVITY LABEL-FREE DETECTION DNA HYBRIDIZATION"</p> <p>APPLIED OPTICS, OSA, OPTICAL SOCIETY OF AMERICA, WASHINGTON, DC, US,</p> <p>vol . 41, no. 10,</p> <p>1 April 2002 (2002-04-01), pages 2074-2078, XP001102355</p> <p>ISSN: 0003-6935</p> <p>figure 1</p>	1-9
A	<p>NAGEL M ET AL: "A functionalized THz sensor for marker-free DNA analysis"</p> <p>PHYSICS IN MEDICINE AND BIOLOGY IOP PUBLISHING UK,</p> <p>vol. 48, no. 22,</p> <p>21 November 2003 (2003-11-21), pages 3625-3636, XP009058954</p> <p>ISSN: 0031-9155</p> <p>figures 1,2</p>	1-9
A	<p>STEWING F ET AL: "A new class of improved-efficiency THz filters for on-chip detection of biomaterials"</p> <p>MICROWAVE AND OPTICAL TECHNOLOGY LETTERS WILEY USA,</p> <p>vol . 41, no. 2 ,</p> <p>20 April 2004 (2004-04-20), pages 79-82, XP009058933</p> <p>ISSN: 0895-2477</p> <p>figures 1,2,5</p>	1-9
A	<p>BARAS T ET AL: "On-chip THz detection of biomaterials: A numerical study."</p> <p>JOURNAL OF BIOLOGICAL PHYSICS,</p> <p>vol. 29, no. 2-3, 2003, pages 187-194, XP009058927</p> <p>ISSN: 0092-0606</p> <p>figures 1,4</p>	1-9

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2005/020050

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002068018	A1	06-06-2002	AU 3952402 A 18-06-2002
		EP 1340065 A2 03-09-2003	
		JP 2004515764 T 27-05-2004	
		WO 0246748 A2 13-06-2002	
US 2004058339	A1	25-03-2004	AU 7955501 A 21-01-2002
		WO 0204928 A1 17-01-2002	
		DE 10192655 D2 12-06-2003	
		EP 1301774 A1 16-04-2003	
OP 2001074647	A	23-03-2001	NONE
DE 10257225	B3	08-04-2004	NONE
US 6573737	B1	03-06-2003	NONE